

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A method of transmitting Ethernet data frames from a first local area network (LAN) to a second local area network (LAN) comprising the steps of:
 - mapping Ethernet frames from the first local area network onto a Plesiochronous Digital Hierarchy (PDH) data stream via a Generic Framing Procedure (GFP),
 - transmitting said mapped Ethernet frames via a first En-network to a Synchronous Digital Hierarchy (SDH)-level network,
 - receiving the transmission at the second local area network through the SDH-level network ,
 - demapping the mapped Ethernet frames from the first local area network via the Generic Framing Procedure, and
 - transmitting said demapped frames into the second local area network,
wherein the Ethernet frames are transported the entire path from the first local area network to the second local area network without any additional mapping or demapping other than that performed in said mapping step and said demapping step.

2. (Currently Amended) The method of claim 1, wherein the first and second LANs are Ethernet LANs, and wherein said mapping is carried out at a junction point between the first Ethernet LAN and a the first En-network.

3. (Currently Amended) The method of claim 1, wherein the first and second LANs are Ethernet LANs, and wherein said demapping is carried out at a junction point between ~~the a~~ second En-network positioned between the SDH-level network and the second Ethernet LAN.

4. (Previously Presented) The method of claim 1, according to which the transport of the GFP frames through the SDH-network is carried out using virtual containers (VCx-containers).

5. (Currently Amended) A system for transmitting Ethernet data frames from a first local area network (LAN) to a second local area network (LAN), comprising:

- means for mapping Ethernet frames from the first local area network onto a Plesiochronous Digital Hierarchy (PDH) format via a Generic Framing Procedure (GFP),
- means for transmitting said mapped Ethernet frames via a first En-network to an SDH-level network,

wherein the Ethernet frames are transportable the entire path from the first local area network to the second local area network without any additional mapping other than that performed by said means for mapping.

6. (Currently Amended) The system of claim 5, additionally comprising means for:

- receiving the transmission at the second local area network through the SDH-level network via a second En-network,
- demapping the mapped Ethernet frames from the first local area network via Generic Framing Procedure, and

- transmitting said demapped frames into the second local area network,

wherein the Ethernet frames are transportable the entire path from the first local area network to the second local area network without any additional mapping or demapping other than that performed by said means for mapping step and said means for demapping.

7. (Currently Amended) The system of claim 5, in which the means for said mapping is arranged at a junction point between the first LAN and ~~a~~the first En-network.

8. (Currently Amended) The system of claim 6, according to which said means for demapping is arranged at a junction point between the second En-network and ~~a~~the second LAN.

9. (Previously Presented) The system of claim 5, in which the transport of the GFP frames through the SDH-network is carried out with virtual containers (VCx-containers).

10. (Previously Presented) The system of claim 5, wherein the first and second LANs are Ethernet LANs.

11. (New) A system for transmitting Ethernet data frames from a first local area network (LAN) to a second local area network (LAN), comprising a first node having:

a mapper configured to map Ethernet frames from the first local area network onto a Plesiochronous Digital Hierarchy (PDH) format via a Generic Framing Procedure (GFP),

a transmitter configured to transmit said mapped Ethernet frames via a first En-network to an SDH-level network,

wherein the Ethernet frames are transportable the entire path from the first local area network to the second local area network without any additional mapping other than that performed by the mapper.

12. (New) The system of claim 11, further comprising a second node having :
a receiver configured to receive the transmission at the second local area network through the SDH-level network via a second En-network,
a demapper configured to demap the mapped Ethernet frames from the first local area network via Generic Framing Procedure, and
a transmitter configured to transmit said demapped frames into the second local area network,
wherein the Ethernet frames are transportable the entire path from the first local area network to the second local area network without any additional mapping or demapping other than that performed by the mapper and the demapper.

13. (New) The system of claim 12, wherein the demapper is arranged at a junction point between the second En-network and the second LAN.

14. (New) The system of claim 11, wherein the mapper is arranged at a junction point between the first LAN and the first En-network.

15. (New) The system of claim 11, in which the transport of the GFP frames through the SDH-network is carried out with virtual containers (VCx-containers).

16. (New) The system of claim 11, wherein the first and second LANs are Ethernet LANs.